



**Emergency Communications**

Tuesday, April 3, 2018, 7:00 pm

**Committee Minutes**

LAH Town Hall Council Chambers: 26379 Fremont Road, Los Altos Hills, CA 94022

<b>Members</b>	<b>Call Sign</b>	<b>Attendance</b>
Dru Anderson, Co-Chair	KG6LAD	P
Bob Anderson	KC6ZWG	E
Jim Heintzelman	KD6Y	A
Ben H. L. Hu, Secretary	KK6HH	E
Edwin R Jones	W7WPO	P
Andrew Kirk	WB6CLS	P
Scott Overstreet, Co-Chair	N6NXI	P
Sam Wood	K6MSR	P
<b>Council/Staff</b>	---	
Gary Waldeck, Council Liaison	K6AIR	P
<b>Associate Members</b>	---	
Larry Carr	KE6AGJ	P
Kjell Karlsson	KD6VPP	P
Neil Katin – EC	K2LL	P
Bill Lattin	KK6PCA	P
Greg Olsen	K6XM	P
<b>CERT Attendees:</b>		
Mauri Okamoto-Kearney	KM6LXC	P
Terry Kearney	KM6LTQ	P
Eduardo Arias	KM6SCX	P
Cathy Hill	KM6GPO	P

1. Roll Call: Co-chair Dru KG6LAD called the meeting to order @ 1905 hours and Acting Secretary Neil Katin K2LL took the roll. Attendance (14) including 5 members, Council Liaison Gary K6AIR, 5 associates and 4 CERT members.
2. Minutes approved: The March V3 minutes were unanimously approved by members present for Final on motion by Ed Jones W7WPO, second by Andy Kirk WB6CLS, with correction noted by Larry Car KE6AGJ who cited in Section 5b that “current Emergency Coordinator” should say “current SEC (Section Emergency Coordinator.”
3. Public comments from the floor:
  - a. KQED special on the Santa Rosa/Napa area fires and the value of ham radio. Discussion cited Duncan's reference to the KQED special article about the learnings of the Napa fire and how a more procedural use of ham radio would have been of benefit to emergency communications and warnings to neighborhoods in the paths of the multiple fires. The article was summarized by Gary and highly recommended for reference. He said the town is considering

referencing it in their next newsletter. Larry talked about how Nixle only reached 10% of the population because since only 10% signed up for it; Nixle is opt-in.

- b. Dru: encouraged folks to attend upcoming senior fire safety and fall prevention program; arranged with SCCFD by Town Park and Recs Coordinator Sara Robustelli.
  - c. Dru: Requested volunteer ham radio operators to sign up for annual town pathway run and the following volunteered: Andy Kirk; Ed Jones; Scott Overstreet, and Dru Anderson (possible.)
4. ECC Activities:
- a. Council liaison Gary Waldeck K6AIR. No additions to earlier discussion when he cited that the KQED article regarding ham radio value mentioned earlier and reiterated that the town may be add to its next newsletter.
  - b. Neil, EC: advised that two new CERT hams earned their licenses at a recent "ham cram" - Ed Bridgeman, Dan Helms. Neil announced that the next recon net will be Apr 10; there also will be a joint County, CERT Recon, ECC drill Apr 21. Scott suggested that CERT recon members be encouraged that they are welcome to participate in the weekly Monday 8 p.m. SPECS net sequence. The nets start at SPECS level and branch to local city ham nets. He noted that it is an additional opportunity for hams, new and seasoned, to participate on the radio for operations experience, and getting familiar with local net operations, and people involved. Larry added that "Larry: knowing who you will communicate with in an emergency is important to ham emergency communications operation." He said he plans to schedule face-to-face recon meetings with ECC and other community hams.
5. Old Business:
- a. Neil updated the progress on the Alt EOC supplementary equipment. He said he has a list developed and just needs to fill in a few more items. He suggested considering using the 2nd CERT trailer as a town Alt EOC. Gary said he didn't think that would work because there are 2 different agencies involved and, in an emergency, who would have the priority access. He suggested developing a proposed a unified emergency response team to serve the Town's emergency needs.
  - b. Gary also noted that there is the current 'fixed' alternate EOC at Foothill college. Dru asked to put this discussion on next month's agenda, and Co-chairs Dru and Scott will look into potential right paths in the interim.
  - c. ARDEN update: Neil said the work is still making progress; and will be doing more testing this weekend. He suggested contacting the lead, David Gilmour if you're interested in working on the project.
  - d. Duval tower. The town's planning department, as part of a new process, asked the ECC to look at the Duval town renewal application to see if there was any town ham equipment on it. Scott looked at the site. Drawings we looked at was for a Sprint tower at the church site on Duval. They are not considering a large antenna tree, but a new tower. Bottom line, Scott advised that we can't leverage anything from this project site as far as improved transmission.

6. New Business:

- a. recon training: last net went very well; had 15 people participate. Will do 2x / month training nets. Will have drill and face-to-face meeting too.
- b. Dru: what do ECC folks have to do in order to be Recon? Larry: be interested, practice on net, attend a drill.
- c. CERT Actions after an earthquake: requested review (will distribute after the meeting.). Neil: need to document what we want our staff to do in an emergency, and get town to approve. Next step after ECC/CERT approve is to circulate to Marsha Hovey (the town's Emergency Manager) for feedback.

7. Tech Talk: Topic "Antennas" discussion lead: Scott Overstreet N6NXI

- a. Described antennas, radiation patterns. Different antenna types: 1/4 wave; grounding plane for antenna; adding a counterpoise to HT.
- b. Antennas with stacked ¼ wave segments "squish" the emission pattern to direct more of the power radially out from antenna, and less up and down.
- c. Antenna gain: antennas don't 'make signal': they just redirect it. to provide grounding for better transmission.
- d. Polarization: vertical vs horizontal polarization: transmitter and receiver must match to get good propagation.
- e. Scott demo'ed the inside of a Comet X50. Scott demo'ed Yagi antennas and described "front to back" ratio (the amount of power transmitted in front vs behind the antenna). Yagi's are directional antennas with most signal sent in front, and little signal behind.
- f. Multipath: if radio signal is reflected along multiple paths, the signals will interfere with itself, resulting in spots of greater and lesser signal strength. If you suffer from multipath: moving just a few inches can result in better (or worse!) signal. That's one reason why it's a good idea to move a little if you are having bad coverage.
- g. Knife edge refraction: the radio signal will refract over the top of a hill so you will sometimes get coverage even when shielded by a hill (i.e. no line of sight). But the propagation is very dependent on the specific terrain.
- h. Terry and Mauri requested for next month's tech talk to have a discussion about packet and its use. Neil volunteered to lead the discussion.

8. References for further information:

- KQED Article: <https://goo.gl/sEjNMd>
- CERT Actions after an earthquake: [goo.gl/4xHKWy](http://goo.gl/4xHKWy)

9. Reminders:

- a. LAH town events: <http://www.losaltoshills.ca.gov/calendar.aspx>.
- b. ECC QRG (Quick Reference Guide) available online at: <https://goo.gl/h93sye>
- c. ARES/RACES courses & events: <http://www.scc-ares-races.org/aresraces.htm>
- d. CERT & PEP training; CERT Supervisors and members activities: <http://www.lahcfd.org/community-programs/public-classes>.

Town AlertsLink:: <http://www.losaltoshills.ca.gov/381/EMERGENCY-ALERTS>

Alert SCC: <https://www.sccgov.org/sites/alertscc/Pages/home.aspx>

a.

10. Adjourn: Ed moved to adjourn, and it was approved unanimously at 21:19 hours.

*Respectfully submitted: Neil Katin KK6HH, ECC Acting Secretary*